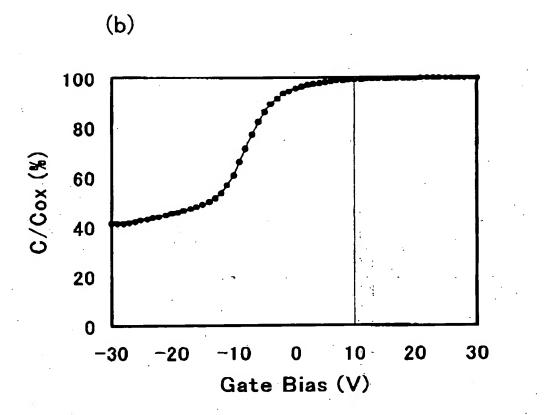
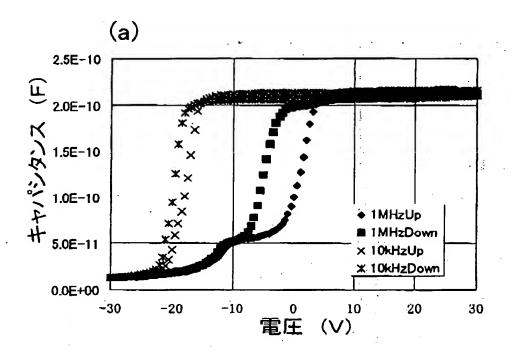
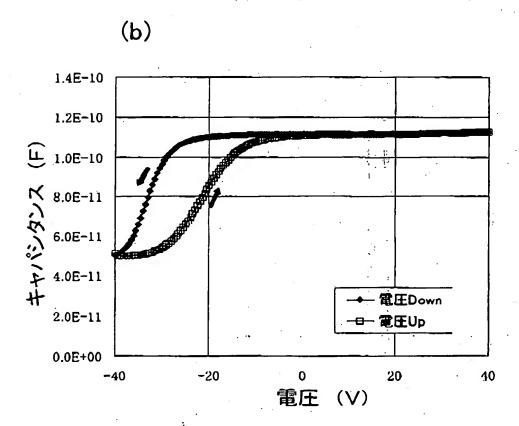
FIG. 1

$$\begin{array}{c} \text{CH}_{3} - \text{C} = \text{C} \\ \text{B} \\ \text{N} \\ \text{N} \\ \text{B} \\ \text{C} = \text{C} - \text{CH}_{3} \\ \text{C} = \text{C} - \text{CH}_{3} \\ \end{array}$$

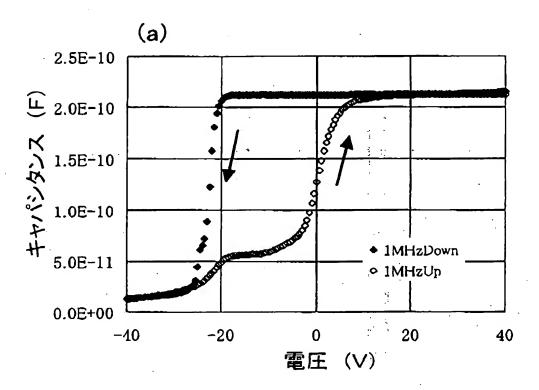


F1G. 2





F I G. 3



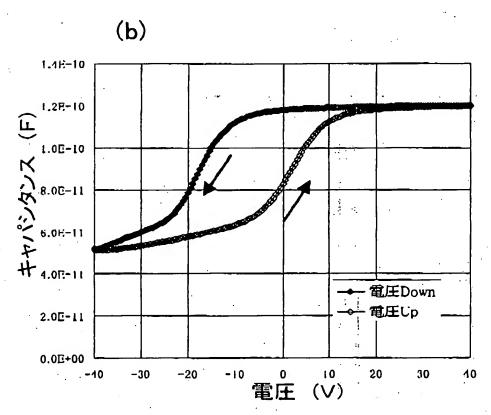


FIG.4

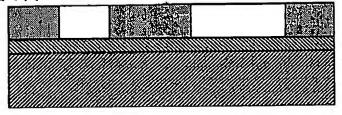
$$CH \equiv C \qquad \bigcup_{\substack{R \\ R_3 \\ C}} C \equiv CH \qquad CH_3 \qquad CH_4 \qquad CH_4 \qquad CH_4 \qquad CH_4 \qquad CH_5 \qquad CH_5$$

$$CH \equiv C \qquad \begin{matrix} CH_3 \\ N \\ N \\ N \end{matrix} \qquad \begin{matrix} CH_3 \\ N \end{matrix} \qquad \end{matrix} \qquad \begin{matrix} CH_3 \\ N \end{matrix} \qquad \begin{matrix} CH_3 \\ N \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \begin{matrix} CH_3 \\ N \end{matrix} \qquad \end{matrix} \qquad \begin{matrix} CH_3 \\ N \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \begin{matrix} CH_3 \\ N \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \begin{matrix} CH_3 \\ N \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \begin{matrix} CH_3 \\ N \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \begin{matrix} CH_3 \\ N \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \begin{matrix} CH_3 \\ N \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \begin{matrix} CH_3 \\ N \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \begin{matrix} CH_3 \\ N \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \begin{matrix} \begin{matrix} CH_3 \\ N \end{matrix} \qquad \end{matrix} \qquad \end{matrix} \qquad \end{matrix}$$

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F 1 G. 5

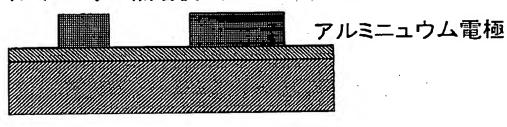
試料にメタルマスクを取り付け



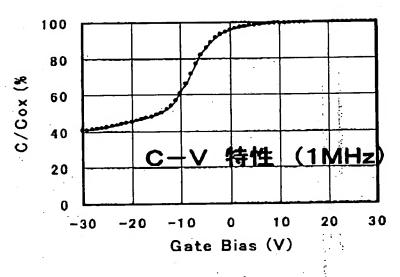
メタルマスク ボラジンポリマー シリコン基板

(a)

アルミニュウム蒸着後メタルマスクを除去

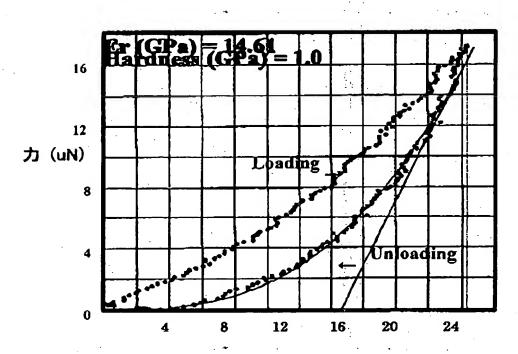


(b)



(c)

F I G. 6

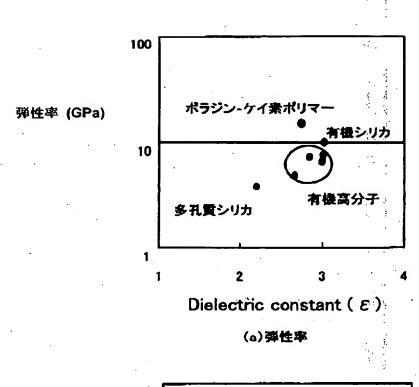


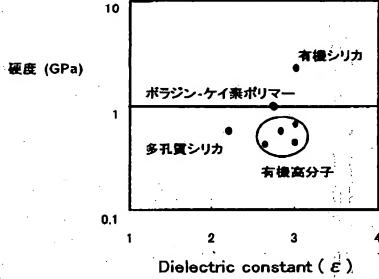
埋め込み深さ (nm)

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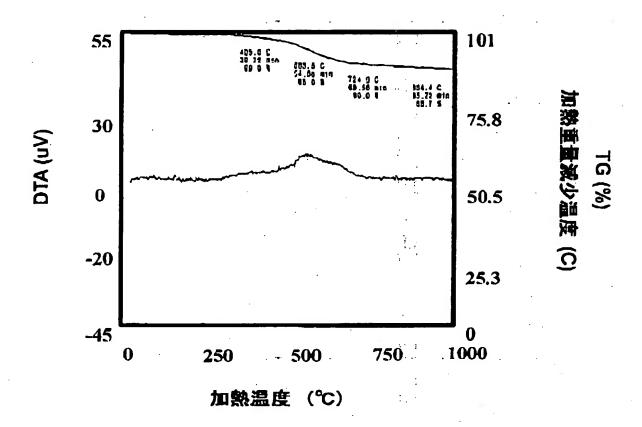
FIG. 7





(b)硬度

F I G. 8



23.

F1G.9

2 111

ミ合ド有

アベンンオキサゾール

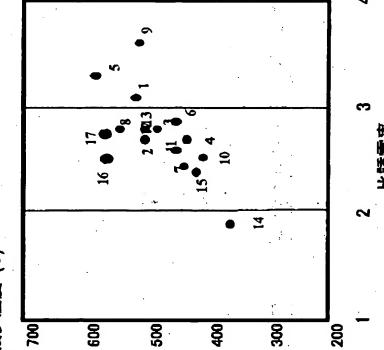
コンソエードラ

非極性ポリオレン、 ポリインダン

ンキノリン リフェニルキノ コンAF

米・ア・ボーン ポテ環ボボリア状ララ

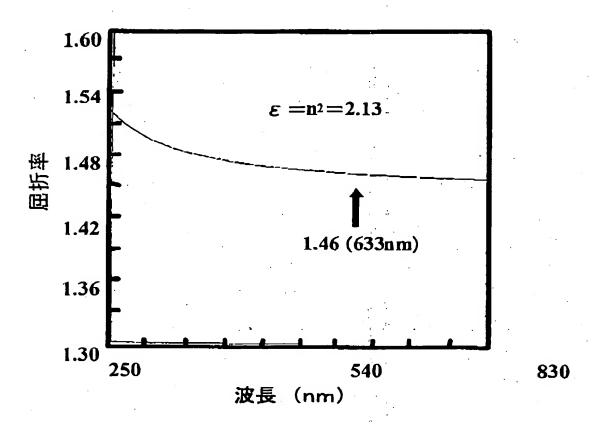
レツツ



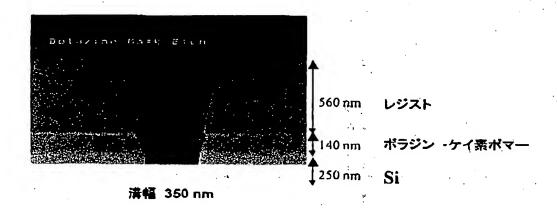
<u>ග</u> 加熱重量減少温度 TG (%)

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FIG. 10



F I G. 11



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ALLE COPY

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FIG. 12



エッチング ハードマスク(非 PFC) 腊間絶録膜 (水素 /窒素)

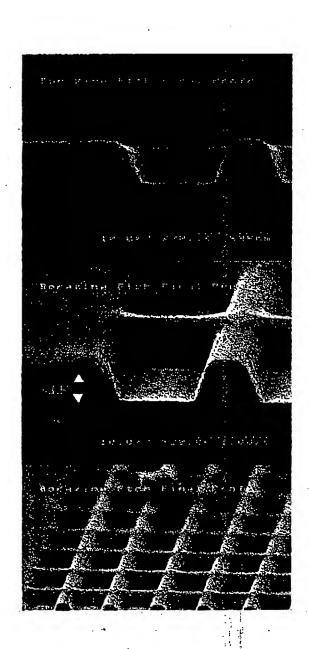


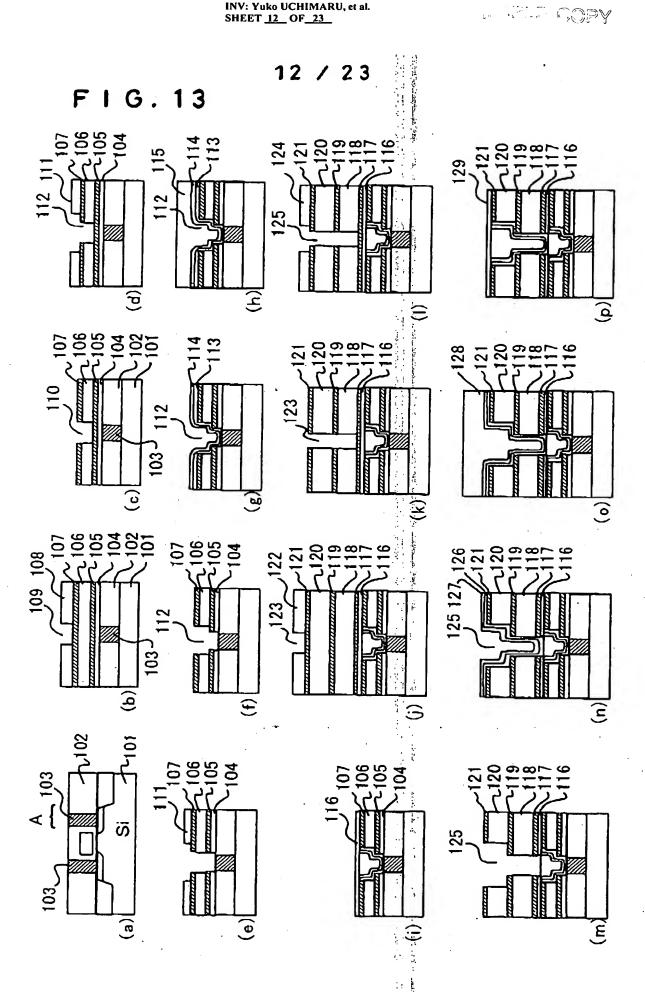
(a)

(b)

(c)

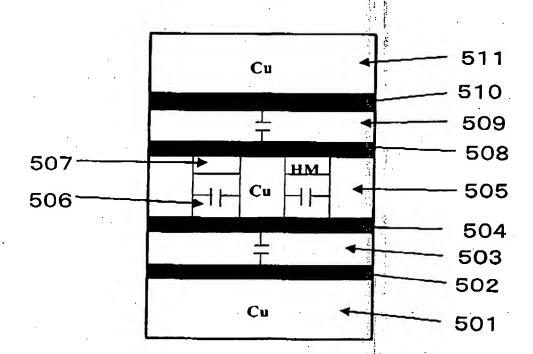
(d)



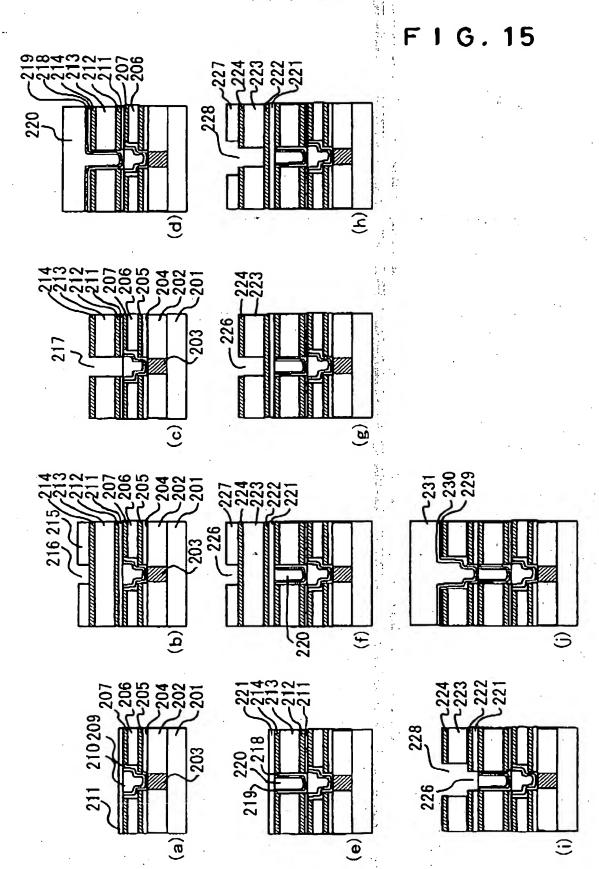


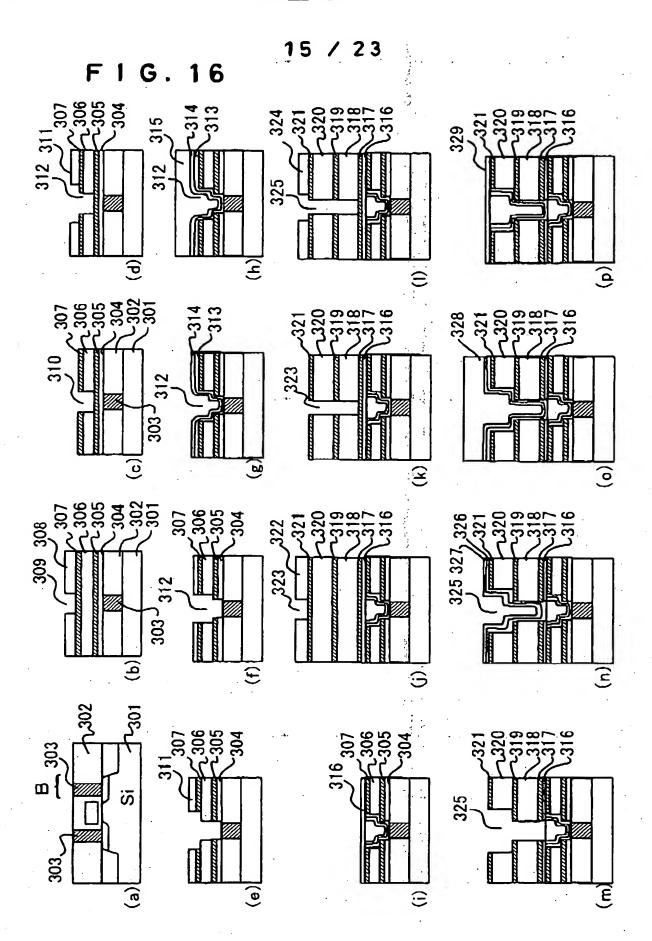
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F I G. 14



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F1G.17

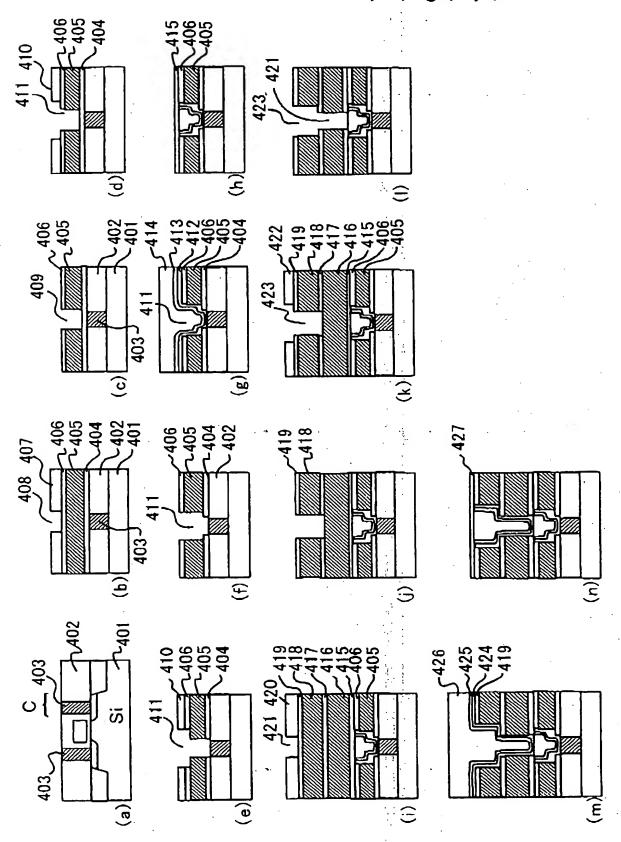
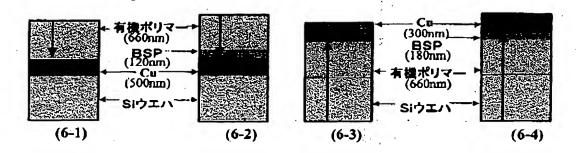


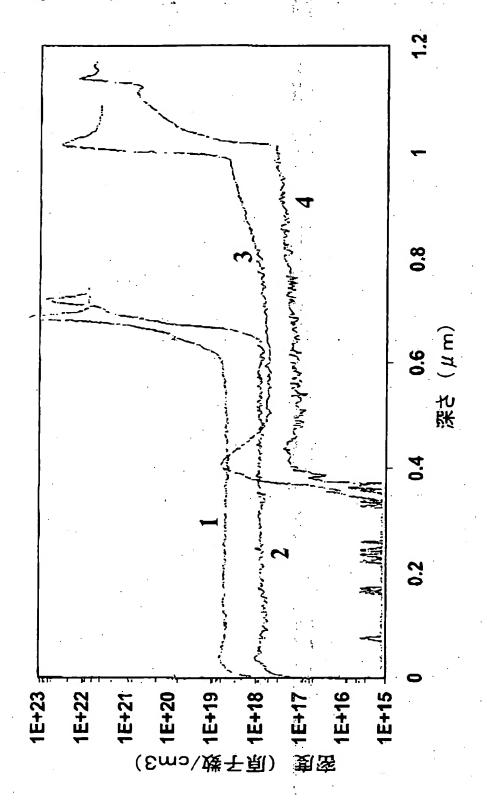
FIG. 18



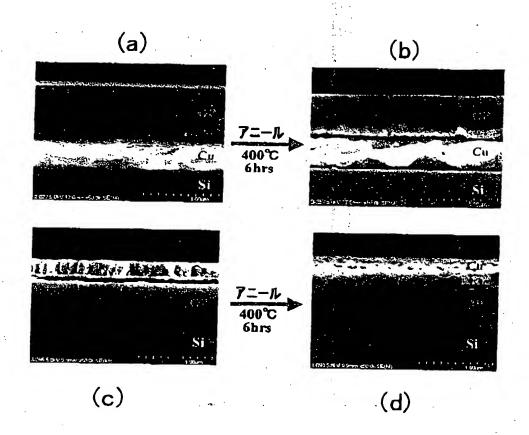
	構造	Cu atoms/cm3
1	Si/Cu(500nm)/OP(660nm)	5×1018
2	Si / Cu(500nm) / BSP(120nm) / OP(660nm)	8×1017
3	Si / OP(660nm) / Cu(300nm)	6×10 ¹⁷
4	Si/OP(660um)/B\$P(180nm)/Cu(300nm)	1 × 1017

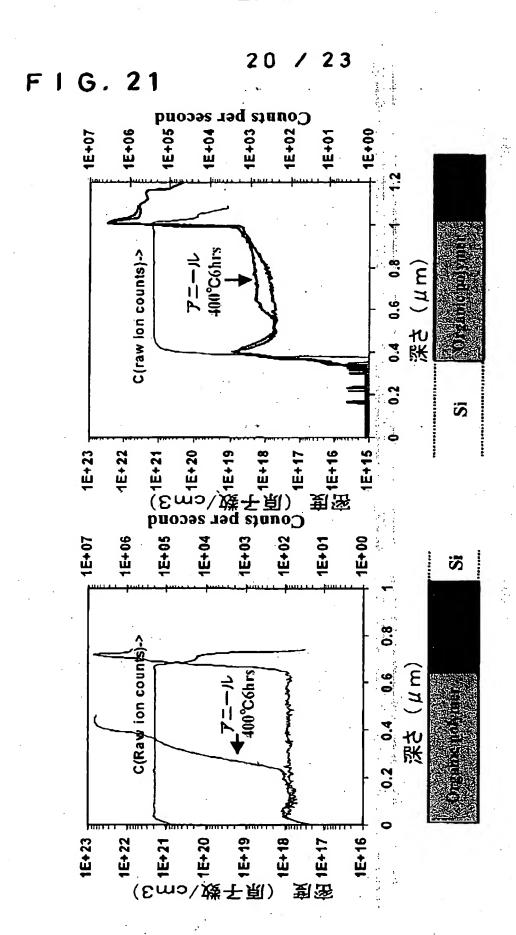
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FIG. 19



F1G.20



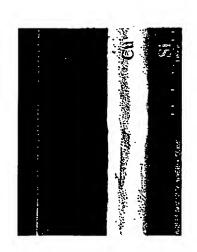


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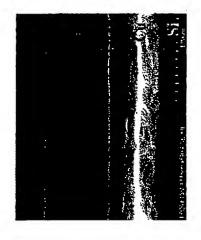
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F I G. 22



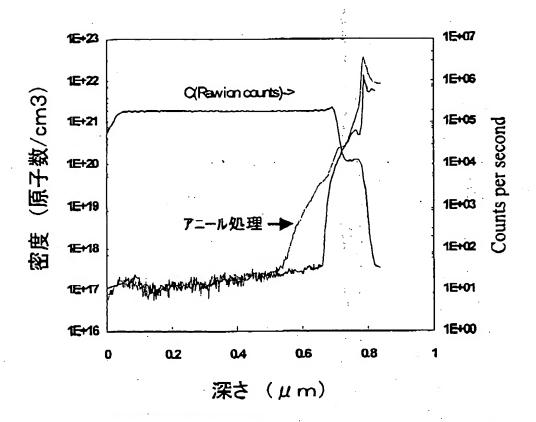
7=-1k 400°C·6hrs



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F1G.23



Organic polymer

Si

F1G.24

